



**DEPARTMENT OF BUILDING SURVEYING  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITI TEKNOLOGI MARA**

**STUDY OF SOLID WASTE DISPOSAL SYSTEM IN  
HIGH-RISE BUILDINGS BETWEEN CONVENTIONAL  
SYSTEM AND CENTRALIZE VACUUM SYSTEM (CVS)**

**AHMAD ANWAR BIN MOHD ZAKI  
2007275922**

**BACHELOR OF BUILDING SURVEYING (HONS.)**

## **1.0 INTRODUCTION:**

Rising population in the country, intensive urbanization, coupled with a robust industrial growth, a more affluent population etc. have all contributed to high volume of solid wastes being generated in the country. The increased generation and accumulation of solid waste are being beginning to produce social, economic and environmental problems of significant proportions.

Solid wastes are arising from man's domestic, social and industrial activities is increasing in quantity and variety as a result of this increase in populations, rising standard in living and developments in technology (*Michael J. Suess, Solid Waste Management, Selected topics, World Health Organization, 1986, pg. 1*)

Nowadays many high rise building used various systems as to ensure that the solid waste will disposed with efficient way. Basically this system as to achieve in efficient building management, also comfortable for occupant.

Preventing and managing waste in cost, qualities, comfortable, performance, and practicality is at the main point of sustainable development. Waste implies unnecessary depletion of unnecessary costs, and environmental damage. Sustainable waste management is about using resources more efficiently. Solid waste management is a major challenge for Malaysia to achieve Vision 2020 which lays out the direction for Malaysia to become a fully developed nation by 2020, which are presents a challenge to established policies and practices in development of solid waste management especially for high-rise building.



	2.5.2 CENTRALIZE REFUSE CHUTE VACUUMS SYSTEMS	30
	2.5.2.1 INTRODUCTION OF INTELLIGENT SYSTEM	30-31
	2.5.2.2 CHARACTERISTIC OF CENTRALIZE VACUUMS SYSTEMS	32-33
	2.5.2.3 COMPONENTS OF CENTRALIZE VACUUMS SYSTEMS SYSTEM	34-41
	2.5.4 FLOW OF CENTRALIZE VACUUMS SYSTEMS SYSTEM	42-45
	2.5.2.5 GENERAL STANDARD FOR CENTRALIZE REFUSE CHUTE VACUUMS SYSTEMS	46-48
	2.5.2.6 DESIGN CRITERIA OF THE CENTRALIZE VACUUMS SYSTEMS SYSTEM	49
	2.5.2.7 CHOOSING THE CORRECT QUANTITY OF CHUTES AND CONTAINERS	50
	2.6 CONCLUSION	51
<b>3</b> <b>(DEFINATIONS OF TERM)</b>	3.1 METHODOLOGY	53
	3.2 RESEARCH PROCESS	54
	3.3 COLLECTION DATA	55-56
	3.4 DISTRIBUTION FLOW OF QUESTIONNAIRE (SAMPLE) AND INTERVIEW SESSION WITH MANAGEMEN	57
	3.5 METHOD OF EFFECTIVENESS ANALYSIS	58

CHAPTER	CONTENTS	PAGE
4	4.0 INTRODUCTION	60
(CASE STUDY)	4.1 CASE STUDY FOR CENTRALIZE VACUUM SYSTEM	61
	4.1.1 CASE STUDY 1: MAJU TOWER	62
	4.1.1.2 ORGANIZATION OF SOLID WASTE DISPOSAL MANAGEMENT	64-65
	4.1.1.3 CENTRALIZE VACUUM SYSTEM EQUIPMENT IN MAJU TOWER	66
	4.1.2 CASE STUDY 2: APARTMENT KASTAM DI RAJA MALAYSIA, KUALA LUMPUR	67
	4.1.2.1 VIEW OF THE KASTAM APARTMENT BUILDING	68
	4.1.2.3 SITE LOCATION	69
	4.1.2.4 SITE PLAN	70
	4.1.2.5 ORGANIZATION OF SOLID WASTE DISPOSAL MANAGEMENT IN KASTAM APARTMENT	71
	4.1.2.5.1 OUT SOURCES CONTRACTOR	71
	4.1.2.6 VIEW OF CVS AT KASTAM APARTMEN	72
	4.2 CASE STUDY FOR CONVENTIONAL SYSTEM	73
	4.2.1 CASE STUDY 3 : KBS TOWER	74
	4.2.1.1 ORGANIZATION OF SOLID WASTE DISPOSAL MANAGEMENT IN KBS TOWER, PUTRAJAYA	76
	4.2.1.2 MEDIUM FOR SOLID WASTE DISPOSAL IN CONVENTIONAL SYSTEM	77
	4.2.1.2.1 FRIEGHT ELEVATOR	77
	4.2.1.2.1 SOLID WASTE COLLECTION ROOM	77
	4.2.3 CASE STUDY 3 : TH SELBORN	78-79
	4.2.3.1 ORGANIZATION OF SOLID WASTE DISPOSAL MANAGEMENT IN TH SELBORN	80
	4.2.3.2 MEDIUM FOR SOLID WASTE DISPOSAL IN CONVENTIONAL SYSTEM	81
	4.2.3.2.1 FRIEGHT ELEVATOR	81
	4.2.3.2.2 SOLID WASTE COLLECTION	81